Perinatal Electronic Vapor Product Use Virginia – PRAMS, 2016-2018



Background

Electronic vapor products (EVPs) comprise a diverse group of devices, including electronic cigarettes (ecigarettes). EVP users inhale an aerosol that typically contains nicotine, flavorings, and other additives. Nicotine is a developmental toxicant that adversely affects pregnancy and infant outcomes. Therefore, EVPs are not safe for mother or baby during pregnancy. 1,2

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS collects site-specific, population-based data on maternal experiences and behaviors before, during, and shortly after pregnancy. Women are sampled for PRAMS between 2 and 6 months after having a live birth. PRAMS sites that met or exceeded the response rate threshold for 2018 (55%) are included in overall estimates for this report.

Women[⋄] Who Reported Electronic Vapor Product (EVP)* Use Before and During Pregnancy

	Virginia % (95% CI)¶			31 PRAMS Sites [†] % (95% CI) [¶]
PRAMS Indicator	2016	2017	2018	2018
Any EVP use in the past 2 years	7.4 (5.3-10.3)	6.2 (4.2-9.2)	4.8 (3.0-7.6)	5.9 (5.5-6.3)
Any EVP use in the 3 months before becoming pregnant	3.9 (2.5-6.2)	3.8 (2.2-6.3)	2.4 (1.2-4.6)	3.4 (3.2-3.8)
Any EVP use in the last 3 months of pregnancy	1.1 (0.4-2.6)	0.9 (0.3-2.8)	0.1 (0.0-0.1)	1.1 (0.9-1.3)
Daily [‡] EVP use in the last 3 months of pregnancy	0.6 (0.2-1.8)	0	0.0 (0.0-0.1)	0.5 (0.4-0.7)

[◊] Women with a recent live birth

Use of EVPs and Combustible Cigarettes Alone or in Combination During^{*} Pregnancy, Among Women[⋄] Who Used EVPS in the Past 2 Years

	<u> </u>			
		Virginia		
		% (95% CI) [¶]		% (95% CI) [¶]
PRAMS Indicator	2016	2017	2018	2018
EVP use only	3.6 (0.6-18.6)^	5.0 (0.7-27.3)^	0.4 (0.1-1.9)^	6.8 (5.3-8.8)
Cigarette use only	11.3 (4.3-26.8)^	24.8 (11.3-46.1)^	2.4 (0.5-10.4)^	21.4 (18.7-24.4)
EVP and cigarette use	10.9 (4.0-26.6)^	9.8 (2.5-31.7)^	0.7 (0.2-2.0)^	11.9 (9.7-14.5)

^{*}Data reported are during the last three months of pregnancy

^{*} Electronic vapor products, defined on the PRAMS survey as: "Electronic cigarettes [e-cigarettes] and other electronic nicotine products (such as, vape pens, e-hookahs, hookah pens, e-cigars, e-pipes) are battery-powered devices that use nicotine liquid rather than tobacco leaves, and produce vapor instead of smoke."

^{†31} PRAMS sites met the 55% response rate threshold for 2018 and include: Alaska, Colorado, Connecticut, Delaware, Georgia, Illinois, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York City, North Dakota, Pennsylvania, Puerto Rico, Rhode Island, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

¶ Weighted percent (95% Confidence Interval)

[‡] Daily EVP use is defined as respondents who reported EVP use of 'once a day' or 'more than once a day'.

^{♦†¶} See footnotes in first table

^{^ &}lt; 60 respondents, may not be reliable

Women[◊] Who Reported EVP Use Before and During Pregnancy, by Characteristics – Virginia, 2018

Characteristic	Any EVP use in 3 months before pregnancy % (95% CI) [¶]	Any EVP use in last 3 months of pregnancy % (95% CI)¶	Daily [‡] EVP use in last 3 months of pregnancy % (95% CI) [¶]
Maternal Race/Ethnicity			
Non-Hispanic White	4.0 (2.1-7.8)	0.1 (0.0-0.2)	0.0 (0.0-0.1)
Non-Hispanic Black	0.3 (0.1-0.7)	0.1 (0.0-0.5)	0
Hispanic	0	0	0
Non-Hispanic Asian or Pacific Islander	0	0	0
Non-Hispanic American Indian or Alaska Native	#	#	#
Non-Hispanic Other	#	#	#
Maternal Age (years)			
≤19	0.5 (0.1-2.1)^	0.5 (0.1-2.1)^	0.3 (0.1-2.2)^
20-24	6.0 (2.0-17.0)	0.1 (0.0-0.3)	0.0 (0.0-0.1)
25-34	1.9 (0.8-4.7)	0.0 (0.0-0.1)	0.0 (0.0-0.1)
≥35	1.5 (0.2-9.9)	0	0
Highest level of education (years)			
<12	0.5 (0.2-1.6)	0.5 (0.2-1.6)	0.3 (0.1-1.2)
12	2.5 (0.7-8.4)	0.1 (0.0-0.2)	0.0 (0.0-0.1)
>12	2.6 (1.2-5.6)	0	0
Prenatal WIC Recipient			
No	2.3 (1.0-4.9)	0.0 (0.0-0.1)	0.0 (0.0-0.1)
Yes	3.1 (0.9-10.7)	0.1 (0.0-0.4)	0.1 (0.0-0.2)

Abbreviation: WIC = The Special Suppplemental Nutrition Program for Women, Infants, and Children

Summary

Based on results from the 2018 data for 31 PRAMS sites, among women with a recent live birth:

- 3.4% of women reported using EVPs during the 3 months before becoming pregnant and 1.1% reported using EVPs during the last 3 months of pregnancy.
- Among women who used EVPs in the past 2 years, 11.9% of women reported using EVPs in combination with combustible cigarettes during the last 3 months of pregnancy.

Resources

E-Cigarettes and Pregnancy: https://www.cdc.gov/reproductivehealth/maternalinfanthealth/substance-abuse/e-cigarettes-pregnancy.htm

ACOG Smoking Cessation Resources: https://www.acog.org/topics/smoking-cessation

ACOG Tobacco and Nicotine Cessation Toolkit: https://www.acog.org/-

/media/project/acog/acogorg/files/pdfs/publications/smoking-cessation-toolkit-2016.pdf

References

- 1. US Department of Health and Human Services. E-cigarette use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2016.
- 2. American College of Obstetricians and Gynecologists. Tobacco and nicotine cessation during pregnancy. ACOG Committee Opinion No. 807. Obstet Gynecol 2020;135:e221–9.

To learn more about PRAMS methods and to see data availability by state and year visit: https://www.cdc.gov/prams

THE BEST SOURCE OF DATA ON MOTHERS AND BABIES

^{◊‡¶}See footnotes in first table

^{# &}lt; 30 respondents, not reported

^{^&}lt; 60 respondents, may not be reliable